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EXAMINER
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RUBY, TRAVIS C

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* RAVI K. ARIMILLI,  
MICHAEL J. ELLSWORTH JR., and  
EDWARD J. SEMINARO

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Appeal 2014-003513  
Application 12/425,210  
Technology Center 3700

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Before: LYNNE H. BROWNE, MICHELLE R. OSINSKI, and  
BRENT M. DOUGAL, *Administrative Patent Judges*.

DOUGAL, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from a final rejection of claims 8–20 under 35 U.S.C. § 103(a) as being unpatentable over Belady (US 2007/0213881 A1, pub. Sept. 13, 2007), Shaw (US 6,269,650 B1, iss. Aug. 7, 2001), and Manole (US 2006/0090494 A1, pub. May 4, 2006). We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

### CLAIMED SUBJECT MATTER

The claims are directed to control of liquid cooled electronics. Claim 8, reproduced below, is illustrative of the claimed subject matter:

8. A system for controlling liquid-cooled electronics, said system comprising:

- an electronics rack including at least one heat-generating electronics subsystem;

- at least one Modular Cooling Unit (MCU) associated with said electronics rack and configured to provide system coolant to said at least one heat-generating electronics subsystem for facilitating cooling thereof, wherein each MCU includes a heat exchanger, a first coolant loop and a second coolant loop;

- a system controller coupled to at least one control valve that controls a flow of liquid that passes through said heat exchanger, wherein said system controller is configured to:

- measure a first set point temperature,  $T_a$ , wherein said  $T_a$  is based on a dew point temperature,  $T_{dp}$  of a computer room;

- measure a second set point temperature,  $T_b$ , wherein said  $T_b$  is based on a facility chilled liquid inlet temperature,  $T_{ei}$ , and a rack power,  $P_{rack}$ , of an electronics rack;

- select a Modular Cooling Unit (MCU) set point temperature,  $T_{sp}$ , wherein said  $T_{sp}$  is the higher value of said  $T_a$  and said  $T_b$ ; and

- regulate said control valve responsive to said selected  $T_{sp}$ .

### OPINION

#### *Claims 8 and 15*

Claims 8 and 15 are independent and are argued together. Br. 4. We select claim 8 as representative. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Appellants argue that “the combination of Belady, Shaw, and Manole would essentially disclose three unrelated actions to increase cooling of a

computer system, i.e., increase a cooling fluid flow, increase a speed of a condenser fan, and increase a speed of a compressor motor.” Br. 10. This is “[i]n contrast to . . . Appellants' claimed subject matter [] directed to regulating a control valve that controls a flow of liquid that passes through a heat exchanger based on a set point that is a higher value of a first set point temperature that is based on a dew point temperature of a computer room and a second set point temperature that is based on a facility chilled liquid inlet temperature and a rack power of an electronics rack.” *Id.*

The Examiner replies that the rejection is not based on the bodily incorporation of the secondary references into the primary reference, but “what the combined teachings of the references would have suggested to those of ordinary skill in the art.” Answer 14 (citing *In re Keller*, 642 F.2d 413 (CCPA 1981)). The Examiner then proceeds to further explain the prior findings from the Final Action of “what the combined teachings of the references would have suggested to those of ordinary skill in the art” and the reasoning behind the combination of references. *Id.* at 14–15.

Appellants provide no argument or explanation as to why the Examiner’s position or reasoning is incorrect. Thus, Appellants’ broad assertion as to what the prior art suggests, without addressing the reasoning as set forth by the Examiner is not enough to inform us of error in the rejection of independent claims 8 and 15.

Claims 12–14, 19, and 20 depend from the independent claims and are not separately argued and therefore fall with claims 8 and 15 for the same reason.

*Claims 9–11 and 16–18*

Appellants argue that Belady does not teach or suggest features of claims 9–11 and 16–18. Br. 10–11. In support of this argument, Appellants recite the language of each of these claims. *Id.* Merely reciting the language of a claim and asserting that the cited prior art references do not disclose that limitation is insufficient. *See In re Lovin*, 652 F.3d 1349, 1357 (Fed. Cir. 2011) (“[W]e hold that the Board reasonably interpreted Rule 41.37 to require more substantive arguments in an appeal brief than a mere recitation of the claim elements and a naked assertion that the corresponding elements were not found in the prior art.”).

For these reasons, we are not apprised of error in the Examiner’s rejection of claims 9–11 and 16–18.

*§ 101 Rejection*

Claims 15–20 are also rejected under 35 U.S.C. § 101. Appellants filed an Amendment on June 20, 2013 to address the rejection, however, the Amendment was not entered by the Examiner. In the Appeal Brief, Appellants do not present arguments pertaining to the § 101 rejection. Accordingly, we summarily affirm the rejection under § 101.

DECISION

The Examiner’s rejections of claims 8–20 are affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

Appeal 2014-003513  
Application 12/425,210

AFFIRMED